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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,086	01/29/2004	Duane G. Martineau	Martineaupal	4597
7590 11/29/2005				
CHARLES C. LOGAN II 8282 UNIVERSITY AVENUE LA MESA, CA 91941		EXAMINER BOEHLER, ANNE MARIE M		
		ART UNIT 3611 PAPER NUMBER		
DATE MAILED: 11/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,086

Applicant(s)

MARTINEAU, DUANE G.

Examiner

Anne Marie M. Boehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Lifferth (USPN 3,372,766).

Lifferth shows a wheel structure for a multi-terrain vehicle with a chassis 21 and multiple left and right propulsion units. The wheel structure 22 includes an axle 17 extending along a y-axis and through apertures in respective cam-shaped bodies 16. Each cam-shaped body has three peripheral segments. A first segment 26 is arcuate and its midpoint is farther from the y-axis than the mid-points of respective second and third peripheral segments 16b.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9, 12-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lifferth in view of Seiler (USPN 3,054,467).

Lifferth teaches the claimed wheel structures 16, which are each part a respective propulsion unit, a chassis 21, a body 18 forming a passenger compartment with seats 19, an engine 27, and drive chains 31, 32 and sprockets. Four propulsion units are mounted to each side of the vehicle chassis by pivotal arms 23 and shock

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absorbers 23a. Each wheel unit includes four cam-shaped wheels 16 driven by a common shaft 17, the cam-shaped wheels having a contact surface covering a 360 degrees.

Lifferth shows one support arm 23 rather than two, one on each end of the axle.

Seiler shows an all-terrain vehicle with a boat-shaped body 10 that floats on water. Propulsion wheel units 26 include a wide wheel 25 and support arms 27 pivotally connected to the chassis and respective inner and outer ends of wheel axle 34.

It would have been obvious to one of ordinary skill in the art to provide the Lifferth wheel units with two support arms, one on each end of the wheel axle, as taught by Seiler, in order to provide a stronger suspension for the wheel. It would also have been obvious to form the body as a buoyant structure, as taught by Lifferth, in order to use the vehicle to travel on water.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lifferth and Seiler as applied to claims 1-9 above, and further in view of Harvey (USPN 5,881,831).

The combination lacks a cavity formed in the second and third perimeter segments to act as a paddle in water.

Harvey shows a vehicle with propulsion units including cam-shaped wheels 20-22, 20'-22'. Each cam-shaped wheel and a first, arcuate perimeter segment that contacts the ground and second and third perimeter segments 25 that include a cavity that forms a paddle in water.

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It would have been obvious to one of ordinary skill in the art to provide cavities in the second and third peripheral segment of the Lifferth wheels, as taught by Harvey, in order to effectively use the wheels to paddle water.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lifferth and Seiler as applied to claims 1-9, 12-17 and 19 above, and further in view of Adams (USPN 5,993,273).

The combination lacks a hydraulic drive system with a primary pump and secondary pumps for each driven axle.

Adams shows an amphibious vehicle with a hydraulic drive system including engine 12, primary pump 40, and secondary pump/motors 30a-c, 32a-c for each wheel.

It would have been obvious to one of ordinary skill in the art to provide a hydraulic drive system, as taught by Adams, in order to provide a drive train that is less complex and less likely to be clogged by dirt.

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lifferth in view of Harvey.

Lifferth lacks a cavity formed in the second and third perimeter segments to act as a paddle in water.

Harvey shows a vehicle with propulsion units including cam-shaped wheels 20-22, 20'-22'. Each cam-shaped wheel and a first, arcuate perimeter segment that contacts the ground and second and third perimeter segments 25 that include a cavity that forms a paddle in water.

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It would have been obvious to one of ordinary skill in the art to provide cavities in the second and third peripheral segment of the Lifferth wheels, as taught by Harvey, in order to effectively use the wheels to paddle water.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oberg shows a suspended drive wheel.

Amour, and Rieli show amphibious vehicles.

Labat shows a vehicle with cam-shaped wheels

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie M. Boehler whose telephone number is 571-272-6641. The examiner can normally be reached on 7:30-5:00, Monday-Thursday, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6612. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Amal 11/21/05
ANNE MARIE BOEHLER
Primary Examiner
Primary Examiner